

REMARKS

Claims 1-15 are pending. Claims 1, 3, 5, 6, 8 and 10 are the independent claims.

Claims 1, 3, 6 and 8 were objected to on the grounds that the limitation “for counting the number of round trips of data packets transmitted” is not supported by the specification. Applicant traverses.

The objected-to language is present in the original claims and therefore provides its own support. Moreover, it is clear from the fact that the term “round trip counter” is used throughout the specification, that “the number of round trips of data packets transmitted” refers to what is counted by the round trip counter, which is clearly defined in the specification. In view of the above, the claim language, which appears in the originally filed claims, is consistent with the description in the specification. Withdrawal of the objection is therefore respectfully requested.

Claims 1-3, 5-8, 10-13 and 15 were rejected under 35 U.S.C. 103 over U.S. Patent 5,570,367 (Ayanoglu et al.) in view of the Stallings, a text book of which an excerpted section was enclosed with the Office Action. Claims 4, 9 and 14 were rejected under 35 U.S.C. 103 over Ayanoglu et al. in view of the Stallings and further in view of U.S. Patent 6,751,209 (Hamiti et al.).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

In the Final Office Action, all of the independent claims were rejected on the basis of at least the combination of Ayanoglu et al. in view of Stallings. In the previous response, Applicant explained why, even when combined, these references do not teach or suggest the limitations of the independent claims. Applicant maintains those arguments and incorporates them by references herein.

Moreover, the rejections based on the above-mentioned combination of references are deficient for an additional reason. In particular, the Examiner has failed to provide a legally sufficient motivation to combine Ayanoglu et al. with the cited teachings of Stallings, namely, the sliding window technique discussed as the “third alternative” at page 550 of that document.

Stallings’ sliding window technique is a technique that is usable on a “reliable network service” and in which, whenever a sender receives an acknowledgment to a particular transport protocol data unit (TPDU), it is automatically authorized to send the succeeding 7 (when the window size is 7) TPDU’s. The sending entity can send at most 7 additional TPDU’s and then must stop. Stallings goes on to say:

“Since the underlying network service is reliable, the sender will not time out and retransmit. Thus, at some point, a sending transport entity may have a number of TPDU’s outstanding for which no acknowledgment has been received. Since we are dealing with a reliable network, the sending transport entity can assume that the TPDU’s will get through and that the lack of acknowledgment is a flow control tactic. This tactic would not work well in an unreliable network, since the sending transport entity would not know whether the lack of acknowledgment is due to flow control of a lost TPDU.” (Emphasis supplied).

Thus, the technique of Stallings that the Examiner has proposed to combine with Ayanoglu et al. is only applicable to a reliable network, for the reasons set forth above by Stallings. The technique is entirely unsuitable for an unreliable network.

However, Ayanoglu et al., relates to a wireless communications network, which a notoriously *unreliable* type of network. This is well known, and is clearly recognized in

the Background section of Ayanoglu et al., which makes very clear that wireless networks are, by their nature, unreliable:

Because wireless data connections use radio signals that are propagated in the constantly changing and somewhat unpredictable freespace environment, those connections are *subject to high bit error rates*. Correction of these errors requires frequent data retransmissions over the wireless connection, which causes throughput degradation due to the delay incurred during the error correction process. This delay takes on added significance when one considers that most higher layer protocols for a substantial number of application processes implement error-recovery on an end-to-end basis. To make matters worse, *unexpectedly high bit error rates cause certain widely used higher layer protocols, such as TCP/IP, to automatically initiate flow control procedures* which further decrease throughput. Col. 1, lines 10-28.

The extremely high occurrence of bit errors in wireless networks make such networks highly unreliable. Stallings explicitly teaches that the sliding window technique cited by the Examiner “would not work well in an unreliable network” for the reasons he delineates. In addition, Ayanoglu et al. shows that wireless networks are quite unreliable. In view of these teachings, one of ordinary skill in the art would follow Stallings’ warning and avoid using the sliding window technique of page 550 of Stallings in a wireless network, and certainly would have no motivation whatsoever to apply that technique in the wireless network of Ayanoglu et al. as proposed in the Final Office Action.

Stallings clearly and explicitly teaches away from the use of the sliding windows technique in an unreliable network, and a wireless network is a leading example of an unreliable network, as is recognized in the Background section of Ayanoglu et al.

Also, Stallings teaches that there would be very little expectation of success in using the sliding window technique in a wireless network, such as that shown in Ayanoglu et al., since Stallings states that this technique “would not work well in an unreliable network,” such as a wireless network. Thus, there is *no reasonable expectation of success*, another requirement for a *prima facie* case of obviousness.

For at least the above reasons, any combination of Stallings' sliding windows technique and any wireless network would be completely improper in an obviousness rejection at least because since Stallings teaches away from such a use.

Since each rejection in the Final Office Action relies at least in part upon this improper combination, all the rejections are untenable. It is respectfully requested that the rejections be withdrawn and the application passed to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

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Respectfully submitted,

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